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Claims 1-26 are rejected under 35 U.S.C. §102(b) as being anticipated by PCT Publication No. WO 92/19669.

The Present Application

The response addresses a single, but key, distinction between the present claims and the cited references, particularly the use of a thermoplastic elastomer, referred to in the specification as "TPE." The nature of the thermoplastic elastomer is disclosed at page 3, line 26 to page 4, line 17. It is to be noted that the term "TPE" is not equivalent to "SBR." As is known in the art and further discussed in the appended declaration the term "SBR" is an abbreviation, not for styrene-butadiene polymers in general, but for the particular type of styrene-butadiene copolymer produced by a process of random polymerization of styrene and butadiene. SBR is inevitably used in a vulcanized (cross-linked) form. Without cross-linking, it does not possess elastomeric properties.

Thermoplastic elastomers, on the other hand, do not require cross-linking to achieve elastomeric properties. Rather, elastomeric properties may be diminished by cross-linking. The nature of this thermoplasticity is referred to in the specification at page 4, lines 7-17. A general definition of thermoplastic elastomers may be found on page 400 of the Kirk-Othmer "Concise Encyclopedia of Chemical Technology." A copy of that page was previously submitted but is enclosed herewith for the Examiner's convenience. As defined, Thermoplastic resins

"...are polymeric structures that soften or melt at elevated temperatures allowing them to be processed into fabricated products that, when cooled, recover the physical and chemical properties of the original resin."

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This general statement does not apply to the polymers generally referred to as SBR. The different nature of SBR and thermoplastic elastomers, such as Kraton™ 1101 and Kraton™ 1107 is shown in Table 1 on previously submitted page 400. Also enclosed is another copy of the previously submitted Kirk-Othmer pages 15-20 full article on thermoplastic elastomers. This article more fully defines the unique characteristics of thermoplastic elastomers.

The References of Record

With reference to the **Thelen** patent, this document discloses a porous resilient paving system comprising four layers, the lowermost layer being of mineral aggregate and the other, superimposed, three layers comprising **vulcanized rubber** particles or fibers. The vulcanized nature of the particles or fibers is emphasized in column 3, lines 13-17, where it states that a preferred source of those particles or fibers is recycled tires. In light of the above discussion and the appended declaration, it is clear that Thelen's vulcanized rubber is not a thermoplastic elastomer. Applicants respectfully submit that the Thelen patent does not anticipate the present application.

With reference to **Bowers (WO 92/19669)**, the Bowers application discloses a method of preparing a sports surface using:

- (a) a particulate material coated with a liquid curing agent, and subsequently treating that material with
- (b) a liquid polymer or prepolymer in situ.

The PCT application further provides at page 5, line 22, for the use of SBR and PU. Moreover, on page 3, lines 10-11 the PCT application discloses "the particulate material may be

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a synthetic or natural rubber crumb." There is no reference or suggestion in the specification to use a thermoplastic elastomer. In light of the above discussion and the appended declaration, it is submitted that the reference to SBR does not suggest the thermoplastic material limitation of the claims. Applicants respectfully submit that the present application is not anticipated by the PCT application.

With reference to the Japanese Abstract No. JP04-048927, the abstract discloses preparation of an elastic playing surface, for example a tennis court, comprising:

- (a) applying to a base a coarse granular rubber layer having cavities in the inner part,
- (b) then applying a fine granular rubber layer; and
- (c) then applying a facing layer.

The Japanese abstract suggest that the layer (a) be, for example, pulverized waste tire, natural rubber, or styrene-butadiene rubber. The Japanese abstract also teaches that the fine material of (b) can be the same material as that of (a). The facing layer of (c) is described, for example, as a polyurethane or styrene-butadiene rubber. The use of the term "rubber" clearly indicates a vulcanized material and not a thermoplastic elastomer. In particular, there is no disclosure in the abstract of the use of any thermoplastic elastomers. In light of the above discussion and the appended declaration, the Japanese abstract provides no motivation to use thermoplastic elastomers. Applicants respectfully submit that the present application is not anticipated by the Japanese abstract.

The Claims Distinguish Patentably Over the References

A declaration signed by the inventor traversing the

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Examiner's §102(b) rejections over Thelan, JP No. 4048927, and WO 92/19669 in accordance with 37 C.F.R. § 1.132 is being submitted herewith. As will become apparent upon an examination of the declaration, the present claims distinguish patentably over the references of record.

As the declaration demonstrates, the references of record fail to suggest the use of thermoplastic elastomers, such as those claimed in the present application, instead suggesting various other, particulate materials. The references of record require vulcanizable materials, whereas the thermoplastic elastomers of the present application could lose many of their desired properties if vulcanized. Rather suggesting the presently claimed thermoplastic material, the cited references teach against thermoplastic material in favor of vulcanized materials. Accordingly, Applicants submit that claims 1-26 differ patentably over the references of record.

Telephone Interview

The Applicants request a telephone interview. Although the Applicants verily believe that the present claims are patentable, the applicants would be amendable to incorporating a definition of "Thermoplastic" into the claims. The applicants would be willing to fax proposed amended claims to the Examiner in advance of the telephone interview.

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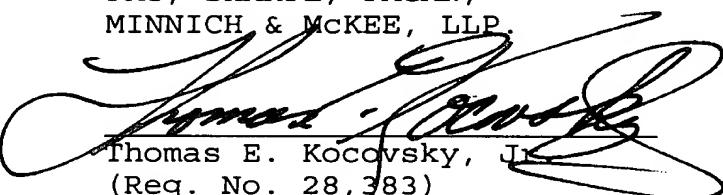
CONCLUSION

In view of the above, Applicants submit that claims 1-26 are now in condition for allowance. An early allowance of all claims is respectfully requested.

If any fee is due in conjunction with the filing of this response, Applicants authorize deduction of that fee from Deposit Account No. 06-0308.

Respectfully submitted,

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